

Trade, which organises the Fair, are already 30 per cent more numerous than those received last year. Sixteen European countries, as compared with only five countries last year, are providing special travelling facilities at reduced rates to encourage their buyers to attend the Fair. Altogether some fifty-six different countries and territories will be thus represented. The Fair may be expected to show in what ways and to what extent British manufacturers have availed themselves of the competitive advantages obtained through Britain's abandonment of the gold standard and as a result of the Ottawa Conference. We hope to deal with scientific aspects of the Fair at a later date, but it is satisfactory to note now that scientific and optical instrument makers will be well represented.

#### Association of British Zoologists

DR. J. GRAY was in the chair as president at the annual meeting of the Association of British Zoologists, which was held in the rooms of the Zoological Society on Saturday, January 7. The morning session was given to discussion of several motions concerning the teaching of biology. It was moved by Prof. E. W. MacBride that vacation revision courses at the universities are highly desirable for teachers of science in schools. This motion was supported by several speakers, but the danger that such courses should be considered sufficient substitute for previous training in the sciences which the teacher was expected to teach was emphasised by Prof. W. Garstang and Prof. Graham Cannon. Mr. H. R. Hewer gave an account of the proceedings of the recent National Conference on the Place of Biology in Education. It was suggested by Prof. Douglas Laurie and Prof. J. S. Huxley that in elementary education a general scientific course is required rather than one in which the scientific subjects are separately organised, but that in such a general course biology must have a leading part. A discussion on the best way of influencing the teaching of biology in schools was introduced by Prof. Graham Cannon. He suggested that this could best be done through the examination boards of the country and in this was supported by Dr. Philippa Esdaile. The president suggested that many of the present difficulties are due to the absence of any body with the function of correlating school and university teaching.

DR. GRAY spoke on "The Importance of Zoological Advice to the State". He said that although the supply of biologists has greatly increased in recent years, there is still great difficulty in persuading good students to undertake work in Government employ. He considers this is partly due to the absence of liaison between the teachers at the universities and those who would later employ the biologists. Some body which could undertake the maintenance of this liaison would be useful. In the afternoon, Mr. W. B. Alexander spoke on the conduct of British ornithological surveys and mentioned the proposed founding of an Institute of Ornithology to deal with such

subjects. Several speakers joined in the discussion of a motion introduced by Prof. F. Balfour Browne concerning the confusion in systematic zoology which results at present from the frequent change of zoological names necessitated by the strict application of the law of priority to them and from the small number of *nomina conservanda* which the International Commission on Nomenclature is able to set up. It was agreed by 23 votes to 3 "that British zoologists should at once set about making a list of proposed *nomina conservanda*, and that to this end a committee of zoologists should be constituted".

#### Earthquake in the North of England

AN earthquake, rather strong for England, occurred at about 8.30 A.M. on January 14. It has been suggested that it was one of the numerous earth-shakes felt along the Irwell Valley fault near Manchester rather than a genuine earthquake. It differed, however, both in intensity and disturbed area from these local shocks, the strongest of which so far known (that of November 25, 1905) only attained the degree 7 (Rossi-Forel scale) and disturbed an area of 144 square miles. So far as we can judge from the early reports, the earthquake of January 14 was strongest in and near Wensleydale, so that it may have been connected with the well-known Craven fault. At Hawes and the neighbouring village of Bainbridge, a few field-walls and chimney-pots were thrown down. The shock was felt over a wide area, from the Point of Ayre lighthouse in the Isle of Man to Whitby and Bridlington, as well as at Manchester, Altrincham, etc. The disturbed area must thus contain about 25,000 square miles. The earthquake was recorded at Stonyhurst and West Bromwich, but not at Kew Observatory.

#### Recent Chinese Earthquake

A VERY severe earthquake occurred in north-west China on December 25. From records at nine widely distributed observatories, the U.S. Coast and Geodetic Survey places the epicentre in lat. 40° N., long. 98° E. (Wire Report of Science Service, Washington, D.C., Dec. 27.) This point lies between the towns of Su-chow and An-hsi-chow, near the edge of the Gobi desert, about 300 miles north-west of the epicentre of the great earthquake of 1927. The earthquake must have been very destructive, but, owing to the isolation of the district, weeks may elapse before accounts arrive from the central area.

#### The Institute for Advanced Study

THE Institute for Advanced Study in the United States was founded in 1930 by a grant of 5,000,000 dollars from Louis Bamberger and Mrs. Felix Fuld. Dr. Abraham Flexner, director of the Institute, has announced that it will be opened in the autumn of 1933, and will be housed temporarily in Fine Hall, the graduate mathematics building at Princeton University. Prof. Albert Einstein has accepted a life appointment as head of the Institute's School of Mathematics. Prof. Einstein will make his home at Princeton; he will be in residence at the

Institute annually from October 1 until April 15, beginning next autumn, and will make a yearly visit to Germany. He will devote all his time to the Institute, and his trips abroad will be vacation periods at his summer home outside Berlin. The following appointments have also been made: Dr. Walter Mayer, of Berlin, Prof. Einstein's assistant, to be associate in mathematics; Prof. Oswald Veblen, generally recognised as one of the leading American mathematicians, and at present professor of mathematics in Princeton University, to be professor; Dr. J. L. Vanderslice, a young Princeton graduate student who has been Prof. Veblen's assistant at Princeton, to be his assistant at the Institute.

THE Institute will be unique among American institutions of higher education, being based upon ideas designed to make it 'a scholar's paradise'. It will concentrate its aim exclusively upon quality in the selection of its teachers and students, and in the nature of its work in scholarship and research. It is hoped that the Institute will accomplish certain definite things in setting a new trend in higher education in America. The salaries paid to its staff and faculty will be on such a scale as to show how much greater results may be obtained when teachers are freed from the necessity of seeking additional remuneration outside the university, and the entire staff of professors and assistants will be on the full-time basis of employment. More emphasis will be laid upon the individual among university graduates, and it is expected to attract students of an independent turn of mind. In order to further this aim of individualism, the Institute will remain entirely separate from any conventional university or college conception. Dr. Flexner makes it clear that while the Institute will occupy temporary space in a Princeton building, it will not be a part of Princeton University. The Institute will consist of a series of schools the first of which will be the School of Mathematics; the second, it is hoped, will be a School of Economics and History. It will be exclusively post-graduate.

#### 'Ethnogenics'

CAPT. GEORGE PITT-RIVERS has published in amplified form (*Human Biology*, vol. 4, No. 2) an address originally given before the Section H (Anthropology) of the British Association, in which he coins the term 'ethnogenics' for "the study of those forces, amenable to social control, which may influence the fertility and survival rate of variations of type in a population". He discusses the early history of anthropology, its long period of infancy as a science, and the reasons why anthropologists continue to regard it as an infant science. This appears to arise from a failure to agree about the scope of anthropology or as to how its subject matter should be classified. The view is emphasised that the progress of anthropology depends on a re-synthesis of its various branches, biological and cultural, including eugenics, genetics, demography, population questions and psychology. The concep-

tions of race, population and culture as the tripartite aspects of man in time, conditioning and being conditioned by the environment—all are included in the implications of race-population change or ethnogenics. The need for studies of racial, social and economic disintegration among civilised as well as primitive peoples is emphasised.

#### Expedition to Northern Iraq

THE departure is announced of a joint expedition of the British Museum and the British School of Archaeology in Iraq (Gertrude Bell memorial) to conduct excavations at Arpachiyah, on the upper Tigris, four miles east of Nineveh. The expedition will be under the direction of Mr. M. E. L. Mallowan, who was with Dr. R. Campbell-Thompson at Nineveh last year. The choice of site has been determined by the fact that it is the only known prehistoric site in northern Mesopotamia. The investigation on which Mr. Mallowan was engaged last year on the neighbouring site of Nineveh reached virgin soil at a depth of 92 ft., of which 72 ft. was prehistoric material, and revealed evidence of five stages of culture, ranging in date from about 3000 B.C. (Stage 5) to about 5000 B.C., polychrome pottery being found in Stage 2, which in its earliest form showed affinities with Samarra ware. At Arpachiyah evidence of culture comparable with that from the archaic levels at Ur, Kish and Erech has been found and the surface finds are similar to material from the bottom of a pit at Nineveh. It may, therefore, be expected with some confidence that excavation at Arpachiyah will yield evidence which will much enlarge knowledge of the very early periods of civilisation in northern Mesopotamia.

#### Spike Disease in Indian Sandal

AN editorial article in the September number of the *Indian Forester* (vol. 43) deals with progress in forestry research. The writer commences by directing attention to the report of the seventh Spike Conference (reproduced in this number). It is more than thirty years since the first attempts to study the spike disease of sandal were made. Sandal is one of the major forest products throughout southern India, and the value of the trade in this precious timber amounts to 30-40 lakhs of rupees annually, apart from the market value of the sandalwood oil. Most of the sandal-bearing forests are affected by the spike disease, the presence of which reduces the sandal output by about half, and in many places has killed out valuable crops. So far, in spite of the close study made, no cure has been found and the issue is complicated owing to the sandal being itself a parasite and unable to flourish without some other tree species as a host. The various governments affected have combined in the research work which is now being conducted on an intensive scale. Spike disease of sandal is but one out of many problems which await the investigator in Indian forest research. The Government forest estate alone covers an area of 160,000,000 acres; the forest area in the Indian States covers 45,000,000 acres; whilst in addition